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APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5"

AUTHORS: Leshchinskiy, N. I., Shtan', A. S., Sinitsyn, V. I. 32-11-59/60

TITLE: On the Problem of the Organization of Laboratories for Work With Radioactive Substances (K voprosu ob organizatsii laboratoriya dlya raboty s radioaktivnymi veshchestvami).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1396-1398 (USSR).

ABSTRACT: In the introduction to this article it is explained that the problem concerned has not been dealt with sufficient clearness in scientific publications. A publication with the title "Planning of Laboratories for Work with Radioactive Isotopes" by I. V. Malashenko is declared most decidedly to be at fault because it is based upon wrong and obsolete conceptions. The article mainly criticizes several measures mentioned in the publication by Malashenko, and the allegedly "correct measures" are given in order to be compared with the former. The article contains a sample plan for the laboratory concerned, from which it is possible to distinguish strictly between "contaminated rooms", "passage rooms" and "pure (unccontaminated) rooms". According to the plan the laboratory consists of the following parts: 1. A storage room for radioactive substances. 2. A repair room to deal with the "contaminated zone" from within. 3. Medical and dressing stations, shower baths, and rooms where clothes can be changed. 4.

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On the Problem of the Organization of Laboratories for Work With Radioactive Substances, 32-11-59/60

Washroom with special facilities for conveying "contaminated washing", and a device for taking over "pure (decontaminated) clothes".
5. A room for work carried out with little active substances with built-in chest of drawers. A "pure corridor" with doors leading to "pure rooms". 7. Emergency exit from the "contaminated zone". An automatic manipulating device for the transport and handing out of radioactive substances to the row of protective chambers ("boxes"), where work is carried out. It is pointed out in the article that the use of wooden material (also if painted) for boxes, chests, etc., in the "contaminated zone" is not permitted. Provision is made for thorough ventilation and corresponding filtering of rooms. Filters may be exchanged only on the "contaminated side". "Contaminated waste" must be examined as to the degree of their contamination, and must be removed and isolated. In conclusion it is said that planning of the sanitary installations is further studied and developed in various different forms to suit scientific institutes as well as technical and agricultural institutes.

There are 1 figure, and 3 Slavic references.

AVAILABLE: Library of Congress.

Card 2/2

PROLOV, Yu.S., otv.red.; ZHAVORONKOV, N.M., red.; AGLINTSEV, K.K., red.; ALEKSEYEV, B.A., red.; BOCHKAREV, V.V., red.; LESHCHINSKIY, N.I., red.; MALKOV, T.P., red.; SINITSYN, V.I., red.; POPOVA, G.L., red.; NOVICHKOVA, N.D., tekhn.red.

[Manufacture of isotopes; Large gamma-ray machines; Radiometry and dosimetry; transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science] : Trudy Vsesoiuznoi nauchno-tehnicheskoi konferentsii po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniyu v narodnom khozisistve i naуke: Poluchenie izotopov. Moshchnye gamma-ustanovki. Radiometriia i dozimetriia. Moskva, Izd-vo Akad.nauk SSSR, 1958. 293 p. (MIRA 12:4)

1. Vsesoyuznaya nauchno-tehnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniyu v narodnom khozyaystve i nauke, 2d, Moscow, 1957.
(Radioisotopes) (Gamma rays) (Nuclear counters)

LESHCHINSKIY, N. I.

Selecting radiators for isotop devices used in agriculture. Sbor.
nauch.-tekhn. inform. po elek. sel'khoz. no.7:39-43 '59.
(MIRA 13:9)
(Radioisotopes)

11(7), 21(8), 21(3)

AUTHORS: Shtan', A., Leshchinskij, N.

SC7/89-7-4-21/2e

TITLE: New Rules for the Transport of Radioactive Substances

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 4, p 399 (USSR)

ABSTRACT: The Glavnaya upravleniye po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR (Main Administration for the Use of Atomic Energy of the Ministers' Council of the USSR) and the Gosudarstvennaya sanitarnaya inspeksiya SSSR (State Sanitary Inspectorate of the USSR) confirm the new rules for the transport of radioactive substances by rail, aircraft, and automobiles. According to those new rules radioactive substances are subdivided according to the physical characteristics of their radiation into three groups. The first group comprises radioactive substances, which, besides α - and β -particles, radiate also γ -quanta (Co^{60} , J^{137} , Ir^{192} , Cs^{137} and others). The second group comprises such radioactive substances as are sources of a neutron-radiation or also of a neutron- and a γ -radiation. The third group comprises such substances as emit only α - and β -particles (Po^{210} , Sr^{90} , P^{32} , S^{35} , C^{14} and others). The packings in which the radioactive sub-

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International Rules for the Transport of Radioactive Substances SOV/23-7-4-24/28

stances are transported are subdivided according to the dose rate of γ -radiation on their surface or at a distance of 1 m from the packing into 4 transport categories: 1) The first category comprises such packings on the surface of which the dose rate of γ -radiation does not exceed 0.1 millicurie/sec. These packings are completely undangerous, may be transported by any kind of conveyance, and may stored in any kind of store-room together with other goods. However, the total activity in one package must not exceed 2000 millicurie. 2) The second category comprises such packings in which the dose rate of γ -radiation does not exceed 3 millicurie per second (and at a distance of 1 m from the package does not exceed 0.1 millicurie per second). Also these packages may be transported by any means of conveyance and may be stored in ordinary store-rooms, but not more than 10 units (in the case of transport aircraft 20 units) per transport unit or store-room. 3) In the case of the third category 55 millicurie per second and 2.5 millicurie per second at a distance of 1 m are prescribed. This category of packages must, according to the kind of transport, be kept at a distance of at least 1 to 10 m from human dwellings and at least 5 m from photographic materials. Should a transport in packages of the afore-

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New Rules for the Transport of Radioactive Substances SOV/89-7-4-24/28

mentioned categories be found to be un rational (e.g. because of their too high weight), a fourth transport category is provided. Such packages may be transported in individual cars, automobiles, aircrafts, or at remote spots in ships. Liquids and gases must be transported in hermetically sealed vessels, powders and solids in tightly closed containers. The main package must be enclosed in an additional outer packing. These rules hold for all organizations producing, transporting, and using radioactive substances. There is 1 Soviet reference.

Card 3/3

21(6), 11(7), 21(3)

AUTHORS: Sinitsyn, V., Leshchinskij, N., Gusev, A.

SGV/24-1-4-25/21

TITLE: A New Container for Radiation Sources of High Activity

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 4, pp 399 - 400 (USSR)

ABSTRACT: The necessity arose of transporting high-activity radiation sources and also of filling them immediately from the transport containers. The containers hitherto used were destined for the transport radiation sources having an activity of 400 gram equivalents of radium. From these containers the sources could be taken only in certain water-vessels, and therefore it was not possible to use them for immediately filling devices provided with a dry protective system. Therefore, a new type of containers was now developed, which is destined especially for the transport of high-activity radiation sources and for the direct filling of apparatus with radiation sources. In such a container it is possible simultaneously to transport up to 4 standard cobalt radiation sources having an activity of up to 700 gram equivalents of radium. These containers consists of cast iron cases containing the principal lead shield and the mechanism for conveying the sources into the container, for keeping these

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A New Container for Radiation Sources of High Activity SOV/29-7-4-25/28

sources in the container, and for discharging them. This mechanism may be controlled from the upper part of the container. The sources are filled into the container under a protective shield of water in a basin. In order to avoid the accumulation of random impurities, the surface of the container has as few protruding parts as possible. The sources can be discharged under a protective shield of water or also immediately into the discharge channels of the apparatus by means of a dry shielding system. The container may be transported by means of ordinary conveyances. For this purpose, the case and the lead shield are constructed in such a manner that the dose rate of the radiation at a distance of 0.5 m from the container surface does not exceed 2.5 millicurie/sec. The container weighs about 1 ton. There are 2 figures.

Card 2/2

LESHCHINSKIY, N. I., Cand Tech Sci -- (diss) "Theoretical and experimental foundations for parameters of irradiators of powerful isotopic apparatuses in agriculture." Moscow, 1960. 16 pp; (Joint Council of the All-Union Scientific Research Inst for Mechanization of Agriculture, VIM, and the All-Union Scientific Research Inst for Electrification of Agriculture, VIESKh); number of copies not given; price not given; bibliography at end of text (11 entries); (KL, 26-60, 136)

PHASE I BOOK EXPLOITATION SOV/5366

Bibergal', A. V., V. I. Sinitsyn, and N. I. Leshchinskij

Izotopnyye gamma-ustanovki (Isotopic Gamma-Ray Sources) Moscow, Atomizdat,
1960. 137 p. 4,000 copies printed.

Ed. (Title page): B. M. Isayev. Ed.: V. V. Pereverzev. Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for specialists working with strong radiation sources.

COVRADE: The book is a purported first attempt to deal systematically with the
whole complex of problems in radiation technique and equipment. Present-day
methods of designing gamma emitters of various configurations are discussed,
and examples of the calculation of the individual characteristics of strong
gamma-ray sources given. There are appendixes to facilitate design calcu-
lations. Chs. I to III and V were written by the authors jointly, while Ch. IV
was written by A. V. Bibergal'. References follow each chapter.

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CCV/C-1

PHASE I BOOK EXPLANATION CCV/5410

Tashkent kunga konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izdat. Nauk. Publ., 1960.
140 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskei SSR.

Responsible Ed.: S. V. Starobubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial board: A. A. Al'tilayev, Candidate of Physics and Mathematics; D. M. Abdurazakov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulin, Candidate of Biological Sciences; V. N. Ivashov; G. S. Ikranova; A. Ye. Kiv; Yu. N. Lebedev, Candidate of Physics and Mathematics; A. Z. Minnayev, Candidate of Medical Sciences; D. Nizhanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

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Transactions of the Tashkent (Cont.)

SCV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turshulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Fabaldunova.

PURPOSE: The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: prediction and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radiometric methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

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Transactions of the Tashkent (Cont.)

SOV/5410

instruments used, such as automatic regulators, flowmeters,
level gauges, and high-sensitivity photo-relays, are described.
No personalities are mentioned. References follow individual
articles.

TABLE OF CONTENTS:

RADIONACTIVE ISOTOPES AND NUCLEAR RADIATION
IN ENGINEERING AND GEOLOGY

Lobanov, Ye. M. [Institut yadernoy fiziki UzSSR - Institute of
Nuclear Physics AS Uzbek SSR]. Application of Radioactive Isotopes
and Nuclear Radiation in Uzbekistan

7

Taksoar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv
SSR - Institute of Physics AS Latvian SSR]. Problems of the
Typification of Automatic-Control Apparatus Based on the Use of
Radioactive Isotopes

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- Transactions of the Tashkent (Cont.) SOV/5410
- Leshchinskii, N. I., G. N. Lokshin, and A. S. Shitan' [Glavatom - Main Administration for the Utilization of Atomic Energy]. Organization of Laboratories for Experiments Using Radioactive Substances 132
- Bibergal', A. V., N. I. Leshchinskii, M. M. Korotkov, and O. G. Arakelov. Development of a Transportable Gamma-Plant for Seed Irradiation Before Sowing 148
- Artveladze, I. D., A. A. Bibergal', and T. V. Tsetskhladze [Institut Fiziki AN GruzSSR - Institute of Physics AS GruzSSR] Experimental Semi-Industrial Gamma-Plant for Radiation Processing of Agricultural Products in Georgia 148
- Bibergal', A. V., N. I. Leshchinskii, U. Ya. Margulis, and V. G. Khrushchev [Ministeryo zdravookhraneniya - Ministry of Health USSR]. Some Problems of Design and Construction of High-Capacity Gamma-Plants 155
- 164

Card 9/20

21.5000, 24.6820

T/400
30V/n₂-f₂+1-1/f₂AUTHOR: Leshchinskij, N. I.

TITLE: Method of Exposure Computation for Strong Irradiation Installations. Letter to the Editor

PERIODICAL: Atomnaya energiya, 1960, Vol 8, No 1, pp 6-10 (USSR)

ABSTRACT: The calculations of doses of radiation fields due to strong sources are usually connected with substantial mathematical difficulties. The author developed a simplified method, starting from the equation for the power of the dose P from a point source in uniform infinite medium

$$P = \frac{KM}{R^2} e^{-\mu R} B(\mu, 1 - \beta), \quad (1)$$

where M is activity of the radiation source; R is distance from the source to the point where the value of the dose is being evaluated; K is coefficient taking care of the dimensions of the quantities entering the equation and the total γ -constant of the source. This equation is still complicated since

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Method of Exposure Computation for Strong
Isotope Installations. Letter to the
Editor

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the absorption $e^{-\mu x}$ and the factor of influence ρ depend on the linear coefficient of radiation decrease in matter μ , the thickness of the absorbing layer x , the energy of the radiation $h\nu$, and the effective atomic number Z of the medium. An analysis of the

$$e^{-\mu x} B(h\nu, \mu x, Z)$$

product lead the author to an approximation

$$f(x) = e^{-\mu x} B(h\nu, \mu x, Z) \approx x^2 / b e^{-x},$$

for thick absorbing media, and

$$f(x) = e^{-\mu x} B(h\nu, \mu x, Z) \approx b x + 1,$$

for the thin ones. Some results are in the table

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Values for coefficients of the largest errors
during dose computation

Material	μ	b	a	c	d	e	f	g
Air	0-100	1 (b=0)	0,0	1 (b=1)	0,0			
	0-10	1 (b=0)						
Water (biological objects)	2-20	1 (b=0)						
	2-50							
Aluminum								
Steel								
Cobalt								

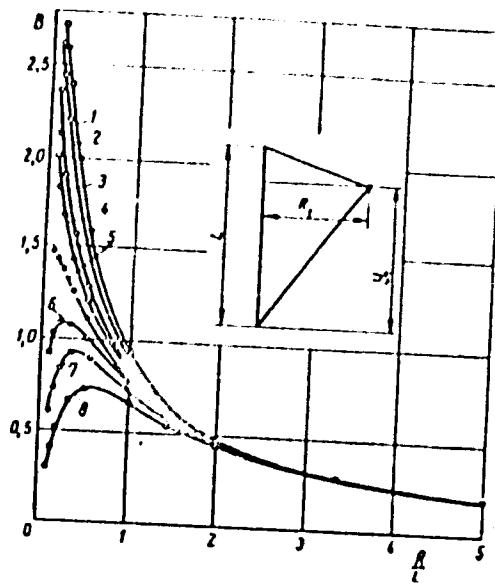
Card 3/7

Method of Exposure Computation for Strong
Isotope Installations. Letter to the Editor

77223
SOV/59-5-1-16/29

into account absorption and the factor of increase.)

Fig. 1. Coefficient B versus
R/L for the following values
of Y_1 : 1 = $1/2L$; 2 = $3/4L$;
 $3 = 7/8L$; 4 = $15/16L$; 6 = $17/$
 $16L$; 7 = $9/8L$; 8 = $5/4L$.



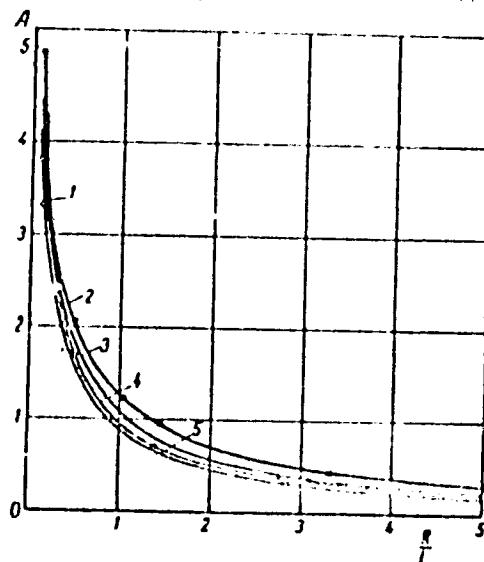
Card 5/7

Method of Exposure Computation for Strong Isotope Installations. Letter to the Editor

77222
SGV/CG-8-1-16/a

The variation of Λ (containing the influence of thin layers of the absorptive medium) is shown in Fig. 2.

Fig. 2. Coefficient Λ versus R/L for the following values of y_1 : 1 = $1/2L$; 2 = $5/4L$; 3 = $9/8L$; 4 = $3/4$ and $1/2L$; 5 = $7/8L$.



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Method of Exposure Computation for Strong
Isotope Installations. Letter to the
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77222
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The term $a_1x_1^2L/R$ takes into account the influence of thick layers. Eq. (5) can be extended for the case of absorptive multilayers.

$$P = \frac{K_H}{LH} \left(a_1x_1^2 \frac{L}{R} + b_1x_1A + c_1H \right) \left(a_2x_2^2 \frac{L}{R} + b_2x_2A + c_2H \right) \dots \left(a_nx_n^2 \frac{L}{R} + b_nx_nA + c_nH \right), \quad (6)$$

where n is the number of absorbing layers. An inhomogeneous linear source can be broken up into a set of equivalent point sources, and the total dose is then the sum over the individual ones. Comparing calculated results with experimental data from various references, agreement was within a 10% error. This accuracy should be considered sufficient since it is inside the limits of experimental errors. There are 2 figures; 1 table; and 6 references, 5 Soviet, 1 U.S. The U.S. reference is: G. White, Phys. Rev., 80, Nr 2, 154 (1950).

SUBMITTED:

April 4, 1959

Card 7/7

S/089/60/008/04/08/009
B113/B017

AUTHORS: Bibergal', A. V., Leshchinskiy, N. I.

TITLE: On the Problem of the Accuracy of the Computation of the Build-up Factor of Gamma Radiation in Absorbing and Scattering Media of Small Thicknesses

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 4, pp. 372-373

TEXT: For computing the build-up factor B_0 ($h\nu$, $\mu_0 x$, z) = $A_1 e^{-\alpha_1 \mu_0 x}$ +
 $+ A_2 e^{-\alpha_2 \mu_0 x}$ (1). α_1 , α_2 , A_1 , A_2 - coefficients for various gamma radiation energies and nuclear charge numbers of the z absorbing and scattering media, μ_0 linear attenuation factor of a narrow γ -beam in the given medium, x - layer thickness of the medium. According to this formula exact values for the factors taken from Refs. 1-5 are obtained for materials with high atomic weight; with water e.g. only for layers

VB

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On the Problem of the Accuracy of the
Computation of the Build-up Factor of Gamma
Radiation in Absorbing and Scattering Media
of Small Thicknesses

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thicker than 60 cm. With $x < 60$ cm, $f(x) = e^{-\mu_0 x} B(hv, \mu_0 x, z)$ (especially for a Cs¹³⁷ source) exceeds the value given in Refs. 4-5. This is explained by an inaccurate selection of the coefficients in (1) for the given range. Hence for computing the attenuation of gamma radiation of a Cs¹³⁷ source in materials of small thickness it is preferable to determine $f(x)$ from data according to Ref. 6. There are 1 figure and 6 references: 3 Soviet and 3 American.

SUBMITTED: November 13, 1959

✓B

Card 2/2

LAZAREVA, L.; LESHCINSKIY, N.; MOISEYTSEV, P.; SINITSYN, V.; SHTAN', A.

New regulations for working with radioactive substances and sources
of ionizing radiation. Atom. energ. 9 no.6:525-526 D '60.

(MIRA 13:12)

(Radioactivity—Safety measures)

GUSEV, Nikolay Grigor'yevich; LESHCHINSKIY, N.I., red.; BUL'DYAYEV,
N.A., tekhn. red.

[Maximum permissible levels of ionizing radiation] O predel'no
dopustimykh urovniakh ioniziruiushchikh izluchenii. Moskva,
Medgiz, 1961. 198 p. (MIRA 15:2)
(RADIATION---DOSAGE)

214140
22886
S/089/61/010/005/015/C15
B102/B214

AUTHORS: Leshchinskiy, N. I., Shtan', A. S.

TITLE: New rules for the transport of radioactive substances

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 544-545

TEXT: On December 26, 1960 the Gosudarstvennyy komitet Soveta Ministrov SSSR po ispolzovaniyu atomnoy energii (State Committee of the Council of Ministers of the USSR for the Use of Atomic Energy) and the Gosudarstvennaya sanitarnaya inspeksiya SSSR (State Sanitary Inspection of the USSR) published new rules for the transport of radioactive substances. These rules were published in accordance with the Soviet sanitary regulations and the recommendations of MAGATE (Vienna). The rules concern packing, labelling, and transport of the articles. The radioactive articles for transport are divided in three groups: 1) Substances emitting α -, β -, and γ -radiations (such as Co⁶⁰, Cs¹³⁷, etc.), 2) those emitting neutrons or neutrons + gamma radiation, and 3) those emitting α - or β -radiation (Po²¹⁰, Sr⁹⁰, C¹⁴, etc.). According to the dose rate or neutron flux at the packing surface or at 1 m from it four categories of packing for trans-

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22806

S/089/61/012/005 015 015
B102/3214

New rules for the transport of radioactive...

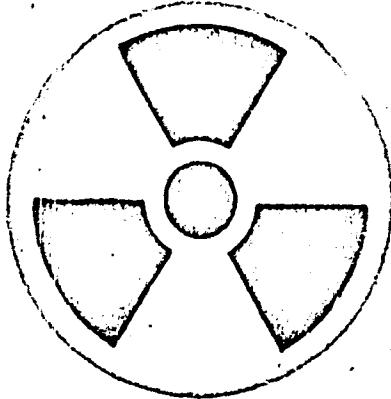
port are provided: 1) Not more than 0.4 mr/hr (γ) or $2 \text{ n/cm}^2 \text{ sec}$ (fast neutrons) at the packing surface, 2) not more than 10 mr/hr ($40 \text{ n/cm}^2 \text{ sec}$) at the packing surface and 0.4 mr/hr ($2 \text{ n/cm}^2 \text{ sec}$) at a distance of 1 m, 3) not more than 200 mr/hr ($800 \text{ n/cm}^2 \text{ sec}$) at the surface and 10 mr/hr ($40 \text{ n/cm}^2 \text{ sec}$) at a distance of 1 m, and 4) 50 mr/hr ($200 \text{ n/cm}^2 \text{ sec}$) at a distance of 1 m; the last category may only be forwarded in special transport. The packing must be able to stand temperature variations from +50 to -70°C and pressure variations from 1 to 0.2 atm. The container must correspond to the regulations of the authorities mentioned at the beginning. The surface contamination of the container must not exceed 200 α -particles or 5000 β -particles per 150 cm^2 (gamma dose rate $\leq 0.4 \text{ mr/hr}$). The radioactive articles for transport are to be marked with a danger sign: a red circle at the center and three red sectors on a yellow background.

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B102/B214



In the packings of the first two categories there may be open radiation sources up to 2000 millicuries or closed sources up to 2000 curies. In packings of the third category there may be 200 curies open sources or a closed source with any activity. In transport undertakings which carry also passengers at the same time the annual dose may reach 0.5 r/year. When the dose rate does not exceed 0.4 mr/hr empty packings may be sent without any restrictions and are not to be marked. There are 5 Soviet-bloc references. X

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PHASE I BOOK EXPOLITATION

SOV/6208

Leshchinskiy, Nikolay Ivanovich

Transportirovaniye radioaktivnykh veshchestv (Transport of Radioactive Materials) Moscow, Gosatomizdat, 1962. 194 p. Errata slip inserted. 6000 copies printed.

Ed.: G. M. Pchelintseva; Tech. Ed.: S. M. Popova.

PURPOSE: This book is intended for personnel associated with the transport of radioactive materials.

COVERAGE: The book deals with the packaging and transport of radioactive materials. Soviet regulations for packaging and transporting radioactive materials are compared with the regulations issued by the International Atomic Energy Agency. Data on maximum permissible doses and radiation fluxes, maximum permissible levels of radioactive contamination, and the labeling of packages are given in the appendixes. No personalities are mentioned. There are 39 references: 31 Soviet, 5 English, 2 German, and 1 Polish.

Card

///

BIBERGAL', A.V.; YEMEL'YANOV, K.N.; KOROTKOV, M.M.; LESHCHINSKIY, N.I.;
RATNER, T.G.

Transportable γ -ray apparatus CUPOS - Cs¹³⁷ -800 for presowing
irradiation of seeds. Atom. ener. 12 no.2:159-160 R '62.
(MIRA 15:1)

(Radiation sterilization)

LESHCHINSKIY, N.I.

Revision of the international rules on the transportation of
radioactive substances. Atom. energ. 15 no.3:272 3 '63.
(MIRA 16:10)
(Radioactive substances—Transportation)

LESHCHINSKIY, N.I.

Minimum permissible distances from packages in transit containing radioactive substances. Atom.energ. 16 no. 4:386-387
Ap '64. (MIRA 17:5)

LESRCHINSKIY, N.I.

Second conference on revising the "Instructions concerning
safe transportation of radioactive materials." Atom.energ.
16 no. 5:464-465 My '64. (MIR 17:5)

SERGEYEV, N.; RIDER, V.A.; ORIFOV, Kh.; BRUNNER, Yu.N.; MANGUSH, Kh.;
ORLOVA, A.S.; SHCHERBAKOVSKIY, N.N.; LESHCHINSKIY, N.S.;
VOYAKOVSKAYA, Ye.S.; DERYABIN, V.I.

Letters to the editor. Zashch. rast. ot vred. i bol. 6 no.5:44-45
My '61. (MIRA 15:6)

1. Inspektor po karantinu rasteniy g.Labinsk, Krasnodarskogo kraja (for Sergeyev).
2. Zaveduyushchiy Primorskym gosudarstvennym sortoispytatel'skim uchastkom Stalinskoy oblasti (for Mangush).
3. Agronom po zashchite rasteniy Shchelkovskogo rayona, Moskovskoy obl. (for Orlova).
4. Zaveduyushchiy Aleksandrovskim nablyudatel'nym punktom, Kirovogradskaya obl. (for Shcherbakovskiy).
5. Inspektor po karantinu rasteniy, g. Fyatigorsk, Stavropol'skogo kraja (for Leshchinskiy).
6. Agronom po zashchite rasteniy g. Kamonets-Podol'skiy, Khmel'nitskoy oblasti (for Voyakovskaya).

(Plants, Protection of)

PUDOVKIN, A.M.; LESHCHINSKIY, N.S.

Revising the system of measures for controlling the San Jose scale.
Zashch. rast. ot vred. i bol. 8 no.1:19-20 Ja '63. (MIRA 16:5)

1. Starshiy agronom-entomolog Stavropol'skoy karantinnoy inspeksii
(for Pudovkin).

(San Jose scale--Extermination)

LESHCHINSKIY, N.S.

Community health. Zashch. i zast. ot vred. i bol. " no.10:43-44
0 '62. (K.R. 16:6)

1. Mezhdunarodnyy sanitinnyy inspektor, Pyatigorsk, Stavropol'-
skogo kraya.
(Pyatigorsk region--Plant quarantine.)

LESHCHINSKIY, N.S.

Increase the responsibility of leaders. Zashch. rast. ot vred.
i bol. 8 no.5:15 My '63. (MIRA 10:17)

1. Inspektor po karantinu rasteniy Pyatigorskogo punkta.
(San Jose scale--Extermination)

LESHCHINSKIY, N.S.

A dangerous weed. Zashch. rast. ot vred. i bol. 9 no.3:46-47
'64. (MIRA 17:4)

1. Mezhrayonnyy karantinnyy inspektor, Stavropol'skiy kray.

LESHCHINSKIY, O. [Leshchyns'kyi, O.], inzh.

Underground lake. Nauka i zhyttia ?? no.2:35-37 F '62.
(MJKA 15:3)
(Oil fields--Production methods)

LESHEVSKII, B.

Kiristallicheskii i vysokochistotnyi ZnCl_2 s vysokim kachestvom.
Leshevskii. Moscow, Voznizdat, 1956.
61 p. Illus., Diagrams, Tables. (o litokhimiicheskikh zashchitnykh).
Bibliographical References.

GUBIN, F.V., podpolkovnik med. sluzhby; LESHCHINSKIY, S.D. (L'vov)

Pulmonary abscess complicated by acute appendicitis and brain
abscess. Vrach. delo no.1:77-79 '59. (MIRA 12:4)

l. Okruzhnyy gospital' pogranichnykh voysk (nauchnyy rukovoditel' -
zasluzhennyy deyatel' nauki, prof. Ye.V. Maslov).
(LUNGS--ABSCESS) (BRAIN--ABSCESS) (APPENDICITIS)

TUKOV, V.G., inzhener; LESHCHINSKIY, S.I., inzhener; BASSIN, F.I.,
inzhener.

Using cement-gypsum plates and reusable frames in machine molding.
Lit.proizv. no.6:28-29 Je '56. (MLRA 9:8)
(Machine molding)

ZVENIGORODSKIY, G.K., inzh.; LESHCHINSKIY, S.N., inzh.; SHEVCHENKO, I.F., inzh.

Over-all mechanization of concreting operations in industrial construction. Mekh.stroi. 18 no.9:16-17 S '61. (MRA 14:10)
(Bashkiria--Concrete construction)

SOV/84-58-7-34/46

AUTHOR: Leshchinskiy, V., Commander of a Helicopter

TITLE: By Helicopter in the Antarctic (Na vertolete v
Antarktike)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 7, p 37 (USSR)

ABSTRACT: A pilot of a Mi-1 helicopter relates his observations
and experience with the whaling flotilla "Slava" in the Antarc-
tic during the fall and winter 1957/1958. The catch of that
season was 4,112 whales.

Card 1/1

L. T. - 1956. 1. V. Savitskiy, professor; V. A. Leshchinskiy, V. A.

SAVITSKIY, I.V., professor; LESHCHINSKIY, V.A.

Effect of various doses of radioactive phosphorus on protein metabolism
Med.rad. 1 no.6:82-90 N-D '56. (MLHA 10:2)

1. Iz kafedry biologicheskoy khimii (zav. - prof. I.V.Savitskiy)
Odesskogo farmatsevticheskogo instituta (dir. - dotsent A.G.Trotsenko)
(PHOSPHORUS, radioactive
eff. of various doses on protein metab.)
(PROTEINS, metab.
eff. of various doses of radiophosphorus)

LESCHINSKY, V. G.

Polonsky, G. M. and Leschinsky, V. G. (U.S.R.). (Seismograph). Russian Patent 15527, issued May 31, 1930.

Uses Rochelle salt plate fastened in an isolated holder and connected by one end with net of an amplifying lamp and by other end with ground and one pole of battery producing glowing of lamp, in anode circuit of which an electric recording apparatus is inserted.

Claim allowed - 1.

LESHCHINSKIY, Vladimir Grigor'yevich; POLOWSKIY, Mikhail Isaakovich;
SUKHANOV, A.P., professor, doktor tekhnicheskikh nauk, retsenzent;
NEVSKIY, V.L., gornyy inzhener, retsenzent; NADION, M.F., redaktor;
EVENSON, I.M., tekhnicheskiy redaktor

[Detachable boring bits] S"emmye burovye koronki. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
1955. 78 p.
(Drilling and boring machinery)

POLONSKIY, Mikhail Isaakovich; LESP.GAINSKIY, Vladimir Grigor'yevich;
SIPYAGINA, Z.A., otv.red.; ISLENT'YEVA, P.G., tekhn.red.;
LOMILINA, L.Y., tekhn.red.

[Hole boring in underground mining] Burenie shpurov i skvazhin
pri podzemnoi dobyche rud. Moskva, Gos.nauchno-tekhn.izd-vo
lit-ry po gornomu delu, 1959. 225 p. (MIRA 13:2)
(Mining engineering)

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5

LESHCHINSKIY, V.K., inzh.; VLADIMIRSKIY, A.P., inzh.

Technological characteristics of the casting of slag jets.
Mashinostroenie no.1:49-51 Ja-F '65. (MIRA 13:4)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5"

ANDROSOV, B. I., kand.tekhn.nauk; BEGAGOYEN, T.A., inzh.; BERKOV, K.I.,
inzh.; BLINOV, I.S., kand.tekhn.nauk; BROITMAN, A.A., kand.tekhn.
nauk; GRITSAY, L.L., kand.tekhn.nauk; ZAVISHA, V.V., kand.tekhn.
nauk; KUNITSKIY, A.A., inzh.; LESHCHINSKIY, V.N., inzh.;
PASECHNIK, I.V., kand.tekhn.nauk; DUBCHAK, V.Kh., inzh., retsenzent;
MATOV, I.T., inzh., retsenzent; TUMM, I.D., inzh., retsenzent

[Manual for ship mechanics] Spravochnik sudovogo mekhanika.
Moskva, Transport, 1965. 832 p. (MIRA 18:12)

MAROVICH, L. A., Prof.; ZHURAVLEV, V. I.

Mar - Diseases

Latent otitis and antritis in adults with alimentary diseases. Zhurn. s.-zdrav., No. 3, 1962.

Monthly List of Russian Acquisitions, Library of Congress, December 1961. 1961-12-01.

LESHCHINSKIY, Ya. L.

Simplified protective bandage for the ear. *Vel'dasher & akush.* no. 2:
48-49 Feb 1953. (CML 24:2)

1. Candidate Medical Sciences. 2. Kiev.

VORBYEVA, N.N.; LMSHCHINSKIY, Ya.L.

Use of antibiotics in the control of *Shigella dysenteriae* carrying.
Pediatrja 39 no.6:60-62 N-D '56. (MLRA 10:2)

1. Iz kafedry mikrobiologii Kiyevskogo meditsinskogo stomatologicheskogo instituta (dir. - prof. A.K.Gorchakov) i 2-y detskoy infektsionnoy bol'nitsy (dir. A.A.Rudik)

(ANTIBIOTICS, therapeutic use,
dysentery, bacillary, ther. of suspected carriers (Rus))
(DYSENTERY, BACILLARY, prevention and control,
antibiotic ther. of suspected carriers (Rus))

ZARITSKIY, L.A., professor; LESHCHINSKIY, Ya.L., kandidat meditsinskikh nauk

Role of unconditioned reflex salivation in purulent otitis media.
Vest. oto-rin. 19 no.1:108 Ja-F '57 (MLRA 10:4)

1. Iz kliniki bolezney ucha, gorla i nosa (zav.-prof. L.A. Zaritskiy)
Odesskogo meditsinskogo instituta i Kiyevskogo meditsinskogo
stomatologicheskogo instituta.
(SALIVARY GLANDS) (EAR--DISEASES)

LESHCHINSKIY, YU. S.

"Problem of Tears in the Diaphragm," Khirurgiya, No. 6, 1949.

Sr. Maintainer Medical Discipline, Chair Mil. Sci., Belotorsk Agric. Inst., -cl 549-.

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5

LESHCHANSKIY, Yu. I.

Leshchanskiy, Yu. I. - "Graphic interpretation of a field emitted by a Hertz oscillator," Trudy Studenich. nauch.-tekhn. o-va (Vest. energet. inst. im. Kol'tsova), Issue 2, 1948, p. 39-50

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Stat'ey, No. 15, 1949)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5"

LESHCHINSKIY, Yu.Ye.; VIL'KHOVSKAYA, R.P.

Planning the development of the bottled gas industry. Gaz.prom.
6 no.8:23-25 '61. (MIRA 14:10)
(Ukraine--Liquified petroleum gas)

1. LESHCHINSKIY, Yu. YE
2. USSR (600)
4. Plastering
7. Reinforcing dry plaster with putty. Zhil.-kom. khoz. 2 No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Unci.

LESMCHINSKIY, YU. YE.

Reservoirs

Repairing the damage to a reinforced concrete reservoir of 10,000 cubic meter capacity. Stroi. prom. 30 no. 5, 1952.
Kandidat Tekhn. Nauk

2
SO: Monthly List of Russian Accessions, Library of Congress, September 1953, Uncl.

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5

LESHCHINSKIY, Yu.Ye., kandidat tekhnicheskikh nauk.

Collapse of a water tower. Stroi.prom. 31 no.6:39-40 Je '53. (MLRA 6:7)
(Water towers)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R000929410001-5"

LESHCHINSKIY, Yu. M.

LESHCHINSKIY, Yu. M.

On the problem of lowering building construction costs. Zhil.-kom.
khos. 4 no.3:3-5 '54. (KTRA 7:6)

1. Glavnnyy inzhener Byuro ekspertizy proyektov i smet Ministerstva
kommunal'nogo khozyaystva USSR.
(Construction industry--Costs)

LESHCHINSKIY, YU. E.

USSR/ Engineering - Heat insulation

Card 1/1 Pub. 77 - 12/23

Authors : Leshchinskiy, Yu. E., Cand. Tech. Sci.

Title : Effective heat insulation

Periodical : Nauka i Zhizn' 21/10, page 29, Oct 1954

Abstract : The problems of heat insulation in construction and refrigeration work are discussed. The processes of making mineral wool from slag and cement foam from concrete are explained. It is claimed that these products reduce the cost of construction and effectively prevent the passing of heat through walls. Illustrations.

Institution : ...

Submitted : ...

LESHCHINSKIY, Yu.Ye.; SHTBYNGEL', N.B.

Construction of an all-welded automobile bridge across the Dniper
in Kiev. Avt.der.18 ne.6:18-20 0 '55. (MLRA 9:2)
(Kiev--Bridges)

LESHCHINSKIY, Yu., kandidat tekhnicheskikh nauk.

Ways of eliminating excesses in designing. Zhil.-kom.khoz. 6
no.5:13-14 '56. (MLRA 9:11)
(Municipal services)

14(6)

307/3-31-3/31

AUTHOR: Leshchinskiy, Yu.Ye., Candidate of Technical Sciences

TITLE: Effects of Wrongly-Secured Support Hinges of Segmental Floodgates

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1950, Nr 5,
pp 33-35 (USSR)

ABSTRACT: The article describes the bad effects of wrongly-secured support hinges of segmental floodgates of an unidentified hydroelectric power plant. As a result, the power plant's pier Nr 4 produced a 10 m crack running along its hinge spot and 3 other piers out of the total of 7, developed lesser defects. These defects were caused by excessive tensile stresses due to an insufficient amount of reinforcement material in piers and poor fastening. In conclusion, corrective measures are described. They consisted of special cement solutions pumped under pressure into the pier bodies, laying of 50 cm thick concrete plates on pier tops, and reinforcing pier Nr 4 - in the worst case.

Card 1/2

SCV/13-1-1/12

Effects of Wrongly-Secured Support Miners of Sapper 1 Team

dition - by 2 vertical, 4 m long, and 90 mm thick
drawing rods. There is 1 diagram and 1 photo.

Card 2/2

LESHCHINSKIY, Yu.Ye., kand.tekhn.nauk

Reinforced concrete uprights for transmission and communication lines. Elek.sta. 31 no.1:62-63 Ju '60.
(MIRA 13:5)

(Electric lines--Poles)

LESHCHINYUK, G.M.

Juvenile hemorrhages. Von. okh. mat. i dot. 7 no.2:62-67 F '62.
(MIRA 15:3)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. V.G.
Butomo) Leningradskogo pediatriceskogo meditsinskogo instituta
(dir. - kand.med.nauk Ye.P. Semenova).
(HEMORRHAGE, UTERINE)

LESHCHINYUK, I.I.

New curare antagonists. Farm. i toks. 25 no. 5:547-555 S-0
(MIRA 18:1)

1. Otdel farmakologii (zav. - deyствител'nyy chlen AMN SSSR
prof. S.V. Anichkov) Instituta eksperimental'noy meditsiny
SSSR.

LESHCHINYUK, I.I.

Depressor action of bencaine. Trudy LSGMI 37:171-175 '58.
(MIRA 12:8)

1. Kafedra farmakologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav.kafedroy - deystvitel'nyy chlen AMN SSSR prof. S.V.Anichkov).

(BLOOD PRESSURE, eff. of drugs on diethylaminoethylbenzoate, depressor action in cats (Rus))

(BENZOATES, eff.
same)

ACC NR: AT6036613

SOURCE CODE: UR/0000/66/000/000/0256/0257

AUTHOR: Leshchinyuk, I. I.

ORG: none

TITLE: Role of central cholinergic and adrenoreactive systems in the regulation of vestibular reactions [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 256-257

TOPIC TAGS: biologic acceleration effect, coriolis acceleration, vestibular analyzer, biologic metabolism, central nervous system, nystagmus

ABSTRACT:

Neurohumoral regulation is one problem in the study of the central mechanisms of vestibular reactions. In the present investigation, shifts in vestibular nystagmus during pharmacological blocking of central cholinergic and adrenoreactive systems were studied. Tests were conducted on rabbits during a chronic experiment. Adequate stimulation of the labyrinths consisted of rotation in a horizontal plane at a rate of 120°/sec. Postrotational nystagmus was recorded electronystagmographically. Biocurrents of the

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ACC NR: A16036613

sensorimotor cortex and mesencephalic reticular formation were also recorded in parallel electronystagmographically to judge the functional state of synaptic transmission.

The following central cholinolytic drugs were used: tropacin (M- and N-cholinolytic); "Metamizil" (M-cholinolytic); "Amifin" (N-cholinolytic); aminazine (an adrenolytic). All preparations were injected intravenously (10 mg/kg dose). Rotational and postrotational nystagmus parameters were studied as a function of the duration, number of impulses, frequency, amplitude, and energy.

Results of the investigations revealed that blocking central M- and N-cholinoreactive systems caused a sharp decrease in all parameters of rotational and postrotational nystagmus except for frequency, which was essentially unchanged. When M-cholinoreactive structures were affected, a dramatic increase in the frequency of rotational and postrotational nystagmus was observed. The remaining parameters of these indices were statistically unchanged. Blocking N-cholinoreactive systems had a pronounced deleterious effect on all rotational and postrotational nystagmus indices. This leads to the speculation that tropacin blockades N-cholinoreceptors. Unlike central cholinolytic agents, aminazine increased the duration, number of

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ACC NR: AT6036613

impulses, and frequency of rotational and postrotational nystagmus, while decreasing amplitude and not altering the intensity of nystagmus.

These data indicate that the cholino- and adrenoreactive systems do not play an equivalent role in the mechanism of vestibulomotor regulation. N-cholinoreactive systems are considered to be more dominant in the regulation of the vestibulosomatic reaction of nystagmus. Comparing the effects of central cholino- and adrenolytics leads to the hypothesis that antagonism exists between functional systems which participate in the formation of vestibular reactions. Bioelectric reactions of the cortex and mesencephalic reticular formation showed that blocking cholinoreactive or adrenoreactive systems did not impede the development of an activation reaction in response to vestibular stimuli.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

СИДОРОВ С.С. инженер-механик ЛОРБЕРГ А.

"Roads and cross-country routes." S.S. Sidorov. Reviewed by
P. Lezhchitskii, A. Lorberg. Voen.-tekhn. zhur. 191 no.5, 45-46
May 1971. (Voen.-tekhn. zhur.) (Sidorov, S.S.)

LESHCHITSKIY, P., inzh.-polkovnik

Designation of a cross-country route at night by a detachment
insuring movements. Voen.-inzh. zhur. 102 no.5:17-18 My '58.
(MIRA 11:6)

(Night fighting (Military science)) (Military roads)

LESHCHITSKIY, Stanislav [Leszczycki, S.] (pol'skaya Narodnaya Respublika)

For the third time at the Soviet geographers' congress. Izv. AN
SSSR. Ser. geog. no.5:15-18 S-0 '64.

(MIRA 17:1)

LISHCHINSKIY, V.YA.; VLADIMIRSKIY, A.P., BANFELD, K.K.

Improving the technology of making parts for charging equipment of blast furnaces. Byull. tekhn.-ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. 17 no. 3:5-9 '64.

(MIRA 17:9)

LESHCHIY, Nikolay Antonovich [Leschchiy, N.P.]; LEVITSKIY, B.F.
[Levytskyi, B.F.]; BAZILEVICH, A.I.[Bazylevych, A.I.],
dots., red.

[Problems on underground hydraulics; for students
specializing in the development of oil and gas fields and
in the geology and development of oil and gas fields]
Zbirnyk zadach z pidzemnoi hidrauliky; dla studentiv
spetsial'nostei rozrobka naftovykh ta gazovykh rodovishch
i geologija ta rozvidka naftovykh i gazovykh rodovishch.
L'viv, L'vivskii politekhnichniy in-t, 1962. 83 p.
(MIRA 17:10)

LEVITSKIY, B.F.; LESHCHIY, N.P.; MOZER, V.Y., prof., red.; KVITKO, I.S.,
red.; SARANTUK, T.V., tekhnred.

[Fundamentals of underground hydraulics] Основы подземной
гидравлики. За red. V.F.Mozera. Lviv, ya no Lviv's'koho
derzh.univ., 1958. 230 p.
(Soil percolation)

LFSHCHIY, N.P.; MOCHERNYUK, V.Ya.

Certain problems in the flow of visoplastic fluids. Izv. vys. uch. zav.; neft' i gaz s no.9:83-88 '62. (MIRA 17:5)

1. L'vovskiy politekhnicheskiy institut.

IESHCHIY, N.P.; MOCHERNYUK, D.Yu.

Affect of thixotropy on viscoplastic liquid flow. Izv. vys. ucheb. zav.; neft' i gaz 6 no.3 71-72 '63.

(P)R (17.6)

1. Lvovskiy politekhnicheskiy institut.

LESHCHIY, N.P.; MOCHERNYUK, D.Yu.

Turbulent flow of clay mud. Izv.v.s.ucheb.zav.; neft' i gaz
7 no. 1;63-68 '64.
(MIRA 17:7)

1. L'vovskiy politekhnicheskiy institut.

LESHCHIY, N.P.; MOCHERNYUK, D.Yu.

Sectional distribution of turbulence rates in clay mud. Izv.
vys. ucheb. zav., neft' i gaz 7 no.10:79-82 '64. (MIRA 18:2)

1. L'vovskiy politekhnicheskiy institut.

LESHCHIY, N.P.

Flooding gas-cut petroleum with water. Izv. vys. ucheb. zav.;
neft' i gaz 8 no.3:41-45 '65. (MIRA 18:5)

1. L'vovskiy politekhnicheskiy institut.

SIUTSKIY, R.L.; LESNCHUK, A.Ye.; MUSIYENKO, I.M.

Laboratory tests of yeast separators, Gidroliz, i lesokhim. prom.
11 no.4:17-18 '58. (MIRA 11:6)

1. Krasnoyarskiy gidrolyznyy zavod.
(Yeast) (Separators (Machines)--Testing)

CHALOV, N.V.; GORYACHIKH, Ye.F.; LESHCHUK, A.Y.

New method for the hydrolysis of wood by concentrated hydrochloric acid. Gidroliz.i lesokhim.prom. Iz no.3:3-5 '59.
(MIRA 12:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidroliznoi i sul'fitno-spirtovoy promyschlennosti.
(Hydrolysis) (Hydrochloric acid) (Wood)

CHALOV, N.V.; GORYACHIKH, Ye.F.; LESHCHUK, A.Ye.

New arrangement for the hydrolysis of wood by hydrochloric acid.
Gidroliz i lisokhim.prom. 12 no.4:1-4 '59. (MIBA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrokhimii
sul'fitnospirtovoy promyshlennosti.
(Wood--Chemistry) (Hydrolysis)

CHALOV, N.V.; LESHCHUK, A.Ye.; ALEKSANDROVA, O.A.

Hydrolysis of polysaccharides of plant tissue with concentrated hydrochloric acid and gaseous hydrogen chloride. Zhur. prikl. khim. 33 no.12:2743-2750 D '60. (MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidroliznoy i sul'fitno-spiritovoy promyshlennosti.
(Hydrochloric acid) (Polysaccharides)

CHALOV, N.V.; LESHCHUK, A.Ye.; KOROTKOV, N.V.; GORYACHIKH, Ye.F.; AMAN, A.Kh.;
PAASIKIVI, L.B.; ALEKSANDROVA, O.A.

Hydrolysis of cellulose lignin by a 44-45% hydrochloric acid solution
in a diffusion battery. Zhur. prikl. khim. 34 no. 12:2737-2745 D '61.
(MIRA 15:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidroliznoy i
sul'fitno-spirtovoy promyshlennosti.
(Lignin) (Hydrolysis)

LESHCHUK, A.Ye.; CHALOV, N.V.

Equilibrium in the system polysaccharides- hydrolysis products -
hydrochloric acid. Gidroliz. i lesokhim. prom. 18 no.5:10-13 '65.
(MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrolyznyy
i sul'fitno-spirtevoy promyshlennosti.

L 39032-66 EWT(m)/EWP(j) RM
ACC NR: AP6021756 (A)

SOURCE CODE: UR/0328/66/000/002/0003/00006

AUTHOR: Chalov, N. V.; Leshchuk, A. Ye.; Kozlova, L. V.; Volkova, T. M.

24

B

ORG: VNIIGS

TITLE: Indices of hydrolysis of polysaccharides with 65-90% sulfuric acid at the equilibrium stage of the reaction

SOURCE: Gidroliznaya i lesokhimicheskaya promyshlennost', no. 2, 1966, 3-6

TOPIC TAGS: polysaccharide, hydrolysis, sulfuric acid, cellulose

ABSTRACT: The equilibrium in the system polysaccharides - sulfuric acid - water - products (glucose) was investigated. On a triangular diagram, the system under consideration (H_2SO_4 - water - glucose) is represented by a straight line. Graphical analysis of the hydrolyzate compositions showed that at room temperature this system consists of a solution of the compound $C_6H_{12}O_6 \cdot 1.37 H_2SO_4$ in 62% sulfuric acid. The hydrolysis of polysaccharides virtually comes to a halt at a certain concentration of acid and sugars because of the formation of compounds between H_2SO_4 and the hydrolysis products, determined as glucose, so that the true concentration of the latter in the solution drops to 62.5% by weight. The H_2SO_4 -glucose compound is analogous to that formed by reacting cellulose with liquid hydrogen chloride or by hydrolyzing cellulose with 38-50% hydrochloric acid. From the data obtained, the minimum possible specific consumption of H_2SO_4 insuring the complete hydrolysis of cellulose and polysaccharides:

UDC: 634.0.263:547.458

Card 1/2

L 39032-66

ACC NR: AP6021756

at 20°C was determined. It is suggested that the specific consumption of H₂SO₄ can be considerably reduced by raising the H₂SO₄ concentration and the temperature of the hydrolysis process. Orig. art. has: 3 figures.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 004

Card 2/2 - ecf

I. 23961-66 EWT(1)/EWA(h) GW

ACC NR: AT6009269 (N)

SOURCE CODE: UR/3169/65/000/002/0052/0055

AUTHOR: Leshchuk, F. A.

ORG: Institute of Geophysics, AN UkrSSR (Institut geofiziki AN UkrSSR)

TITLE: The use of a controlled directional reception [CDR] apparatus for recording waves from great depths

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 2(13), 1965. Metodika geofizicheskikh issledovanii (Methods of geophysical research), 52-55

TOPIC TAGS: seismic wave, geophysic instrument, seismologic instrument, seismologic station

ABSTRACT: A method of using a CDR apparatus for the investigation of deep horizons by means of seismic reflection waves is described. In order to enhance the quality of the seismic wave recording, the rotation speed of the oscillograph drum was slowed down. Two identical oscillographs, one connected directly to the seismic station oscillograph and the second connected to the same device using a delay time, were employed for the recording. The seismic survey was conducted in the Zaporozhskaya Oblast on profiles 10 km in length and 18 to 28 km from a shot point. The data show that there is a good possibility in applying the CDR method for the recording of seismic waves from deep horizons. A detailed diagram of the apparatus is given. Orig. art. has: 4 figures, 2 formulas.

SUB CODE: 08/ SUBM DATE: 03Dec63/ ORIG REF: 008/ OTH REF: 000

Card 1/1

ACC NR: AT7001836

SOURCE CODE: UR/3169/66/000/0018/0075/0084

AUTHOR: Ljubchuk, F. A., Bolokurov, V. S.

ORG: None

TITLE: Study of the structure of the upper portion of the earth's crust in the Ukrainian shield by controlled direction reception

SOURCE: AN UkrSSR. Geofizicheskiy sbornik, no. 18, 1966. Geofizicheskiye issledovaniya stroyeniya zemnoy kory (Geophysical investigations of the structure of the earth's crust), 75-84

TOPIC TAGS: earth crust, geology, geologic exploration, seismic wave, scientific research, seismic prospecting, underground explosion, tectonics, wave propagation

ABSTRACT: In 1963, the Institute of Geophysics of the Academy of Sciences of the Ukrainian SSR performed field experiments using RNP [controlled direction reception] of seismic waves in order to determine the effectiveness of this method in studying the structure of the upper portions of the earth's crust in the presence of the Ukrainian crystalline shield. The RNP investigations revealed a considerable number of seismic boundaries in the upper portion of the crust (down to 7-8 km) which were, generally, not mirror images in the 15-30 cycle range; that the complexity of the wave picture recorded near the explosion point during deep seismic logging operations

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ACC NR: AT7003836

results from wave interference; that RNP makes possible increased effectiveness of seismic investigations under these interference conditions; that the seismic boundaries constructed were nearly horizontal; and that RNP operations are extremely promising for the location and study of zones of tectonic disruption in the crust. A number of seismic boundaries located within the "basalt" layer from 14.5 to 18 km in depth were reliably located. Results obtained are a sufficient basis for wide-spread RNP investigations on the Ukrainian crystalline shield. Orig. art. has: 5 figures.

SUB CODE: 08/SUBM DATE: None/ORIG REF: 005

Card 2/2

NOVIK, I.O.; FRANKOVSKAYA, S.I.; LESHCHUK, G.F.; EPEL'BAUM, Z.H.

Use of carbon dioxide in the compound treatment of pyorrhoea
alveolaris. Probl. stom. 5:74-81 '60. (NIH 15:2)

1. Kiyevskiy meditsinskiy institut.
(CARBON DIOXIDE--THERAPEUTIC USE) (GUMS--DISEASES)

NOVIK, I.O., prof. (Kiyev); BEYM, Z.M. (Kiyev); LESHCHUK, G.P.
(Kiyev)

Role of physical therapy in the over-all treatment of parodontosis.
Probl.stom. 4:241-244 '58. (MIRA 13:6)
(GUMS--DISEASES) (PHYSICAL THERAPY)

EPML'BEYM, Z.M. (Klyev); LESHCHUK, G.F. (Klyev)

Use of an electrical field of ultrahigh-frequency in the treatment of suppurating forms of paradentosis. Probl.stom. 4:275-
278 '58. (MIRA 13:6)
(GUMS--DISEASES) (ELECTROTHERAPEUTICS)

LESHCHUK, I.A.; KONDRAT'YEV, B.P.

Measuring unbalance in communication equipment. Elektresviaz' 10
no.3:75-78 Mr '56. (MLRA 9:7)
(Electric measurements)